



1632

AMENDMENT TRANSMITTAL LETTER (Small Entity) Applicant(s) Sherman, L. A., et al.			Docket No. 55793(48340)	
Serial No. 08/812,393	Filing Date March 5, 1997	Examiner Wilson, M. C.	Group Art Unit 1632	

Invention: **RECOMBINANT CONSTRUCTS ENCODING T CELL RECEPTORS SPECIFIC FOR HUMAN HLA-RESTRICTED TUMOR ANTIGENS**

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TO THE ASSISTANT COMMISSIONER FOR PATENTS:

Transmitted herewith is an amendment in the above-identified application.

- ☒ Small Entity status of this application has been established under 37 CFR 1.27 by a verified statement previously submitted.
- ☐ A verified statement to establish Small Entity status under 37 FR 1.27 is enclosed.

The fee has been calculated and is transmitted as shown below.

CLAIMS AS AMENDED					
	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST # PREV. PAID FOR	NUMBER EXTRA CLAIMS PRESENT	RATE	ADDITIONAL FEE
TOTAL CLAIMS	-	20 =	0 x	\$9.00	\$0.00
INDEP. CLAIMS	-	3 =	0 x	\$42.00	\$0.00
Multiple Dependent Claims (check if applicable) <input type="checkbox"/>					\$0.00
TOTAL ADDITIONAL FEE FOR THIS AMENDMENT					\$0.00

- ☒ No additional fee is required for amendment.
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- ☒ The Commissioner is hereby authorized to charge payment of the following fees associated with this communication or credit any overpayment to Deposit Account No. **04-1105**  
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  - ☒ Any additional filing fees required under 37 C.F.R. 1.16.
  - ☒ Any patent application processing fees under 37 CFR 1.17.

Dated: 10 JAN 2003

*Signature*  
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Docket No.: 55793 (48340)

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: Sherman, L. A., et al.

EXAMINER: Wilson, M. C.

SERIAL NO.: 08/812,393

GROUP: 1632

FILED: March 5, 1997

FOR: RECOMBINANT CONSTRUCTS ENCODING T CELL RECEPTORS  
SPECIFIC FOR HUMAN HLA-RESTRICTED TUMOR ANTIGENS

Honorable Commissioner of Patents  
and Trademarks  
Washington, DC 20231

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By: Patricia A. Barnes  
Patricia A. Barnes

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Sir:

**RESPONSE**

In response to the Office Action dated December 30, 2002, Applicant responds as follows.

In the Action, the USPTO requested Applicant to provide further support for language added to claim 1.

It is believed that the language is fully supported by the specification including the Drawings and claims as filed originally.

For instance, pgs. 5-6, bridging paragraph, generally provide for a TCR fusion produced e.g, as a single chain construct. That construct would be understood to require fusion of nucleic acid recovered from appropriate cells. Applicants' single chain construct is disclosed as including  $\alpha$  and  $\beta$  chains which would be understood to be fused together. This inventive concept is further illustrated by Figure 1 and 2 (showing fusion of several particular constructs). See also Figure 3 (reports the structure of a specific single chain TCR at the nucleic and amino acid levels).

Figure 2 also shows in diagram form fusion of a recovered nucleic acid to produce a specific TCR fusion molecule. That disclosure is further supported by the Examples section.

For instance, see Preparation A (generally providing for chain fusion to make TCR derivatives analogous to those shown in Figure 1 and Figures 3A-3B).

Example 3 and references cited therein provide technical details about recovering specific nucleic acid (genes) encoding  $\alpha$  and  $\beta$  chains, and fusing (inserting) same into a suitable host vector (pBJINeo). Specific resulting constructs include single chains that, as reported on pg. 13, were transfected in vector form into appropriate host cells to measure cytokine production.

It is believed that the instant specification fully supports the requirements of 35 USC §112 in view of the claimed invention.

In particular, Applicants' specification complies fully with §112, for instance, because it reasonably conveys to one of skill in the field that the inventors had possession of the claimed subject matter as of the priority date. It is understood that when the USPTO reviews the sufficiency of the present disclosure, that there will be no obligation imposed for literal description of the claimed subject matter (*in haec verba*). See MPEP §2163.02 (reporting that there is no such obligation). Instead, the test is that Applicant's specification must reasonably convey the inventive concept embodied in the claims to worker reading his case. Under that test,

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Examiner M. Wilson  
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the specification fully satisfies the statutory requirements of 35 USC §112 for reasons mentioned above and in the prior response.

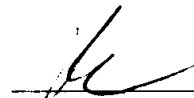
Moreover, a worker reading the instant specification would readily understand that the Applicant was in full possession of a method in which particular recovered nucleic acids encoding TCR  $\alpha$  and  $\beta$  chains could be fused together to prepare the claimed isolated nucleic acid.

Finally, the undersigned would be most grateful if the Examiner could change the attorney docket number in this case to "55793-48340".

Although it is not believed that any fee is needed to consider this submission, the Office is hereby authorized to charge such fee(s) to our Deposit Account No. 04-1105 if it is deemed necessary.

Respectfully submitted,

Date: January 10, 2003

  
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